

place. The black head-stripes, with intervening grey, the neck and breast also grey, showed up clearly. The rufous belly was ill-defined, but in flight the white outer tail-feathers were conspicuous.

The Rock Bunting is widespread in the palaeartic region (cf. Voous 1960). In Africa it breeds in the extreme north-west, in Morocco to Tunisia (cf. Etchécopar & Hüe 1964). It ranges from Asia Minor south to the Lebanon and perhaps also Palestine (cf. Vaurie 1959, Voous 1960). I am not aware of any Egyptian records, but it seems more likely that the birds which I saw were stragglers from eastern Europe or the Near East rather than from north-western Africa. It is impossible to be sure to which subspecies they belonged, although there are several off-season records of nominate *cia* from the Mediterranean Basin. It is worth drawing attention to a record of a juvenile of the species caught in the Tchad region on 11 January 1963 (Salvan 1969: 61).

SUMMARY

Three palaeartic migrants, *Sylvia cantillans albistriata*, *Acanthis cannabina cannabina* and *Emberiza cia* subsp., are definitely recorded from the Republic of the Sudan for the first time, during research at the 2nd Cataract of the Nile in February/April 1964. *Sylvia c. albistriata* may pass through regularly on spring passage (autumn passage being further to the west). *Acanthis c. cannabina* was already known to winter commonly in northern Egypt, and this seems also to apply as far south as the 2nd Cataract. *Emberiza cia* may only be a straggler.

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The history of the Island Hen (*Gallinula nesiotis*), the extinct flightless gallinule of Tristan da Cunha

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INTRODUCTION

The islands of Tristan da Cunha, and the neighbouring Gough Island, South Atlantic, possess a number of highly peculiar land-birds. One of these is the

Island Hen (or Cock, Black Cock, Island Cock), a flightless gallinule resembling the Moorhen *Gallinula chloropus*. The Island Hen was first described from Tristan da Cunha by Sclater (1861), who called it *Gallinula nesiotis*. About thirty years later Allen (1892) described a closely allied form from Gough, under the name *Porphyriornis comeri*, at a time when the Tristan Island Hen was said to have already become extinct. Nowadays the differences between the two forms are considered hardly sufficient even for subspecific separation. They obviously belong to the same species, *Gallinula nesiotis* Sclater (1861).

Modern scientists think it unlikely that a species of bird could evolve into a flightless stage on two different islands, without getting more strongly differentiated, so it is not surprising that doubts arose if *G. nesiotis* ever existed on Tristan. Broekhuysen & Macnae (1949) cautiously expressed such doubts. Eber (1961) compared *G. nesiotis* from Tristan (of which only three specimens were said to be known) with series of the form *comeri*, and concluded that no valid difference exists between the two forms, the alleged differences falling well within the range of variation in the *comeri* series. This, together with the short history of *G. nesiotis* on Tristan, the small number of specimens, and the evolutionary improbability mentioned above, seemed to be strong enough evidence for Eber to have decided that no gallinule ever existed on Tristan, and that the said three specimens really came from Gough, where the species is still abundant. In recent years this opinion has been gaining currency.

Eber neglected the existence of eyewitness accounts. We must realise that the bird was described in 1861, not discovered; it was known long before that time. From records of the history of Tristan and its settlement (e.g. Brander 1940) we know that at least three of the eyewitnesses only lived on Tristan, and never visited Gough (viz. Lambert, Carmichael, and Earle). Together with other evidence, their testimonies leave no trace of doubt that a bird, resembling the flightless gallinule from Gough, lived on Tristan. So, either we have to quit the hypothesis that a bird cannot evolve into flightlessness on two different islands without diverging, or we have to make a choice out of the following possibilities:

1. The Island Hen from Tristan differed from the Gough Island Gallinule, but it has never been collected. The alleged specimens come from Gough, as Eber (1961) suggests.
2. The Tristan specimens differ from the Gough specimens in a hitherto undetected way.
3. The Tristan specimens do not differ from the Gough specimens, because the species has been introduced by man from Tristan into Gough, or conversely at the end of the eighteenth and the beginning of the nineteenth century both Tristan and Gough were frequently visited by seal-hunters, who stayed in the islands for some months.

VISUAL RECORDS

Jonathan Lambert, who styled himself King of Tristan da Cunha, lived on the island from 1810 to 1812. In 1811 he wrote: "We have the little black Cock in great numbers, and in the fall (they) are very fat and delicate. We caught some hundreds last year with a dog, . . ." (Holdgate 1958: 19). Dugald Carmichael, who joined a garrison occupying Tristan in 1816-17, states: "The only landbirds on the island are a species of thrush (*Turdus Guianensis?*), a bunting (*Emberiza Braziliensis?*), and the common moorhen (*Fulica chloropus*)." and: "The Fulica conceals itself in the wood, where it is occasionally run down by the dogs" (Carmichael 1818). A more detailed description comes from August Earle (an artist, later draughtsman of the

“Beagle”), who went ashore on Tristan in 1824. Due to bad weather the ship had to leave in a great hurry, and the Captain “accidentally” forgot about Earle, who had to stay on Tristan for six months before he could get off again. In his diary we read: “Besides our albatross, the dogs caught some small birds, about the size of our partridge, but their gait was something like that of a penguin. The male is of a glossy black, with a bright red, hard crest on top of the head. The hen is brown. They stand erect, and have long yellow legs, with which they run very fast; the wings are small and useless for flying, but they are armed with sharp spurs for defence, and also, I imagine, for assisting them in climbing, as they are found generally among the rocks. The name they give this bird here is simply ‘cock’, its only note being a noise very much resembling the repetition of that word. Its flesh is plump, fat, and excellent eating.” (Earle 1832). The “brown hen” Earle saw was obviously a juvenile bird.

Jules Verne (undated) gives a detailed account of Tristan’s early history, including Earle’s involuntary stay. He invents the story that Lord Glenarvan, during a visit to Tristan da Cunha, enjoyed himself in shooting several couples of black partridges, of which the ship-cook would have to serve an excellent dish. Verne based this story, no doubt, on the description given by Earle. Another eyewitness was William Stirling, who visited Tristan on 12 October 1835, and saw “some moorhens”, exactly ten months before his ship “Tiger” ran aground on Astove, Indian Ocean (Stirling 1843, original not seen). Vague evidence comes from Gurney (1853), who received a letter from a Mr. Strange in Sydney, who had met someone who was familiar with a “wingless” bird from Tristan da Cunha.

In 1856 H.M.S. “Frolic” paid a visit to Tristan da Cunha. Nolloth (1856), who was the Captain, reports: “The only landbirds are said to be a thrush, a kind of partridge, and the ‘Island cock’. The latter is a carrion bird about half the size of a fowl – plumage black, excepting one or two white feathers in the tail; feet green; beak red, with, in its upper part, a red waxy looking protuberance. This bird is frequently hunted with dogs, and is considered a great delicacy by the islanders.” Nolloth made a collection of geological and biological specimens, which he presented to the South African Museum. E. L. Layard added some notes on this collection to Nolloth’s report, which show that it contained the only egg ever collected of the Tristan Island Hen: “But among the eggs is one of peculiar interest, being the egg of a *Gallinule* (misprint for *Gallinule*), called by the islanders the ‘island hen’. Corporal Glass mentioned to me in 1842 that the only bird they had besides sea-fowl was a water hen. Can this egg belong to the apterous bird, which is known to have existed on the island some years since?” (Layard 1856). Corporal Glass was head of the community living on Tristan. The egg should still be in the South African Museum, though there may be little hope of finding it. The Island Hen must have become much rarer in the second half of the nineteenth century, because Sperling (1872), who visited Tristan in 1868, tells us: “The solitary wingless landbird of the island is fast becoming extinct, from the depredations of the wild cats.”

H.M.S. “Challenger”, on its famous cruise, called at Tristan in 1873. The expedition failed to observe the Island Hen, and so great was their authority, that we often find 1873 as the assumed date of extinction. But we must realise that only one day was spent on Tristan, with its 116 sq. km of very rugged terrain. Indeed, from the various reports of this visit we learn that the Island Hen still existed. The islanders said it was scarcely able to fly, could run with great rapidity, and, of course, was excellent eating (Moseley 1892;

Sclater 1878, 1881; Thomson 1877). On several occasions specimens had been sent to Cape Town, and one had been sold to a merchant ship in 1872 (Willemoes Suhm 1876).

The process of extinction may have been completed by the rats, that came ashore for the first time in 1882, on the occasion of the shipwreck of the "Henry B. Paul" (Brander 1940). When in 1906 the "Valhalla" called at Tristan, the islanders said that the Island Hen was no longer to be found (Nicoll 1906).

SPECIMEN RECORDS AND THEIR HISTORY

Only three skins of *Gallinula nesiotis* from Tristan are said to be known, one which died in the gardens of the Zoological Society of London on 8 September 1871, now in the American Museum of Natural History (Greenway 1967 and *in litt.*), and two in the British Museum (Natural History).

There is much confusion about the two skins in the B.M. Sharpe (1894) mentions two adult skins, but Eber (1961) says that one is adult, the other one a juvenile. One of the two dates from 1891, the other one, the type, is from 1861 according to Warren (1966), but from 1864 according to Elliott (1957). A good reason for this confusion may be that, in fact, there are three specimens registered in the B.M., not two, from 1861, 1864, and 1891 respectively, to be found in three different collections. The 1861 specimen is in the type collection, the 1891 specimen is in the main collection, but this one probably originates from Gough. The 1864 skin should be in the collection of extinct birds, but at present cannot be found.

On 25 May 1861, the Zoological Society of London received from Sir George Grey, Governor of the Cape Colony, five Island Hens from Tristan da Cunha, under the care of the society's agent Mr. Benstead (*Proc. Zool. Soc. Lond.*, 1861, meeting 28 May, pp. 208-9). Two were killed in Cape Town, but Mr. Benstead preserved the skins, without heads, and brought these to England. Two others died on board, and were placed in spirit. The fifth could be seen alive in the aviary in June, when Sclater published his description of the species (Sclater 1861). One of the spirit-specimens presumably was stuffed and registered as a type specimen in the B.M. on 16 September of the same year (Warren 1966). The living specimen is probably the one that died three years later, and was purchased from the Zoological Society by the B.M., where it was registered on 30 July 1864 (B.M. reg. no. 1864.7.30.1). The other specimens of Sclater disappeared.

In 1869 Mr. E. L. Layard, in Cape Town, received from the "Islands about Tristan d'Acunha" seabird eggs, island thrushes, finches, and many live Island Hens (Layard 1869). He sent three of these to London, which reached the Zoological Gardens alive (Busk 1869). One of these three may have died two years later, being the 1871 specimen, now in the American Museum of Natural History. The other birds of Layard disappeared. The fate of the bird that was sold to a ship touching Tristan in 1872 (Willemoes Suhm 1876) is unknown.

Skeletal material in the University Museum of Zoology, Cambridge, England (Gadow 1910), appears to be attributable to the birds of Sclater and Layard. A skeleton (bones of trunk), labelled "typus", dated 1861, and received from Sclater in 1865, may be from the same specimen as the type skin in the British Museum. From the label it appears that the sternum of this skeleton is the one depicted in the original description given by Sclater (1861). This label reads: "*Exempl. in loc. cit. delineatum*". The B.M. also possesses the "bones of trunk" (Sharpe 1894). One bird cannot yield two

skeletons, so here reappears one of the lost specimens. On the label of this skeleton is written that it belongs to a stuffed specimen in the collection, dated 1864, so apparently it originates from Sclater's living bird, that died later, and was purchased by the B.M., but at present is missing.

The Cambridge Museum also contains three sterna of "*Nesiotis insularis*" from the "Tristan da Cunha Group", received from E. L. Layard (no date). It is highly probable that these are the remains of the three Island Hens that were presented to the Zoological Gardens by Layard in 1869. However, the individual notes on these sterna about their origin are confusing. They are assigned to "Gouglet Islet", "Inaccessible Id St. Tristam", and "Goujlet Isld", respectively. Since it is not known that *G. nesiotis* ever existed on Inaccessible Island, the second sternum, which is indistinguishable from the other two, is obviously mislabelled. The other two apparently come from Gough, so there is no reason to believe that Layard's specimens really originated from Tristan. In consequence, the 1871 specimen in the American Museum of Natural History should be regarded with suspicion, if we maintain the theory that this is one of Layard's birds.

The remaining skin in the B.M., in the main collection, received 1 August 1891, was originally labelled "*Gallinula chloropus* Cape Colony". On the back of the label is written: "Probably from Tristan da Cunha. see *G. nesiotis* Scl." A second label, later attached in the B.M., reads: "This is not the South African Coot it is probably from Tristan or Gough Isl.", with on the back: "*Porphyriornis (comeri?)*" to which someone added in pencil: "Yes". All this strongly suggests that this bird should be discarded from the list of "true" Island Hens, since we only know that it came from the Cape Colony (note that in 1891 the Gough Island Gallinule was not yet described, while the Tristan Island Hen was already very rare, if not extinct). This leaves us with one single skin of which we know with certainty that it came from Tristan, viz. the type in the British Museum, which was collected on Tristan by a native girl for Sir George Grey (Warren 1966), and taken to Cape Town by a "person formerly in the service of Sir George Grey" (Sclater 1861), where it finally came into the hands of Mr. Benstead. Any question of this specimen having come from Gough can be ruled out, if only on the ground that even today the Tristanites do not allow their womenfolk to visit Gough, or any other island, owing to the hazards of landing.

It is surprising to find that a Mr. Keytel is said to have presented two Island Hens to the South African Museum, collected by him on Tristan as late as 1908-09 (Mathews 1932), especially since we know that Keytel, during his stay on Tristan, only made one attempt to go to Gough, in which he failed (Barrow 1910). The Keytel collection as a whole contains many vagrants, and is most confusing, different enumerations being in disagreement (Mathews 1932, Péringuey 1910, Winterbottom 1958 and *in litt.*). One of Keytel's Island Hens was found in the South African Museum, but on examination it turned out to be a juvenile *Gallinula chloropus*. So either Keytel collected one more vagrant, or he was unreliable. This again leaves us with no more than one "good" skin. It is, therefore, important to know that there must have been three other "good" ones, from long before the date of description (and therefore thought to be *G. chloropus*), that are hardly ever mentioned. These gallinules, presumably collected by Carmichael in 1816-17 (Stresemann 1953), were sold at the Bullock Auction in 1819, and vanished (see below).

EXAMINATION OF SPECIMENS

The material we have now consists of four skins, one of which appears to

be *Gallinula chloropus*, and two of which most likely are *G. nesiotis comeri*. We also have skeletal remains of five birds, three of which apparently belong to *G. nesiotis comeri*. The only reliable skin available is the type in the B.M. On examination I fully agree with previous authors, that no valid differences (in skins) are to be found from the form *comeri*. There is much variation within *comeri*, and characters like "more yellowish feet", and "more white on the wing and on the flanks" are too vague, and hardly, if at all, recognisable in the type skin. The measurements could not be taken, but they are known, and were obtained from M. K. Swales (pers. comm.). They all fall in the middle of the range of *comeri*, except depth and width of the bill, which might have shrunken in such an old specimen.

Comparison of the skeletons, however, reveals a striking difference in size of the sternum and the synsacrum, those of *G. nesiotis nesiotis* being the smaller. This fits in with the assumption that the three birds of Layard (1869) originate from Gough. The sterna of the two "true" *nesiotis* skeletons of Sclater's series, in the B.M. and Cambridge respectively, were compared with seven *comeri* sterna. Two measurements are given, the length of keel along crest (a), and the anterior width (b). The pelvic girdles of the two *nesiotis* skeletons were compared with four of *comeri*. The following further measurements are given: the greatest dorsal width (c), the length of the dorsal outer edge of the ischium (d), and the dorsal length of the ilium, from outer edge of ischium to anterior fusion with the dorsal vertebral processes (e). Averages of measurements of *comeri* are given in brackets. All measurements are in millimetres:

	<i>G. n. nesiotis</i>	<i>G. n. comeri</i>
a.	31.2, 32.5	35.3-39.5 (37.1)
b.	16.0, 16.6	18.0-20.5 (19.0)
c.	25.5, 26.0	26.5-30.8 (28.8)
d.	12.2, 13.6	14.0-14.6 (14.3)
e.	25.8, 27.4	30.0-33.9 (31.9)

(Note: Sclater gives 1.35 inches for "a", which equals 33.7-33.8 mm. The 32.5 mm given above is probably from the same sternum).

The above suggests that the Tristan bird was of much less heavy build than the Gough Island bird, even though it would be better to have more material. It is not unlikely that more bones can be found in the peatbogs near the Settlement on Tristan. Within the Settlement area one might even expect to dig up remains from previous century meals, remembering that the species was excellent eating. Though it has been suggested, it would be fruitless to search for odd surviving Island Hens on Tristan, because in the last decades several attempts have been made to introduce the indistinguishable Gough Island Gallinule there (Swales pers. comm.).

THE GALLINULES OF BULLOCK'S AUCTION

Bullock's "London Museum" contained many birds from Tristan da Cunha, presumably collected by Carmichael in 1816-17. Carmichael is the only likely person to have collected them, although there is no proof of this (Stresemann *in litt.*). Unfortunately Bullock disposed of his collections by auction sale in 1819. Two annotated sale catalogues are known, in the Cambridge Museum and British Museum respectively. Two gallinules from Tristan were sold to either Dr. Leach, who represented the B.M., or to a Mr. Winn (here the two catalogues disagree). Based on their absence in the B.M., Sharpe (1906) concluded that Winn was the buyer. A third one was purchased by a Mr. Ryall. All three specimens disappeared, but it would be

worth while to try and trace them, since they would considerably add to the knowledge of "true" skins.

From the Cambridge copy of Bullock's sale catalogue, it seems that Winn attended the fifth and sixth days of the 26-days sale. On the fifth day he purchased a variety of rather common water birds, without any clue as to where to look for them. On the sixth day he bought several objects that may well be found in some county or local museum. He then spent £92 for an exclusive collection including Pacific feather hats and cloaks, war-clubs, funeral dresses, cloth-beaters, bread-pounders, nose flutes, a fly flap made of the bone of the arm of a chief taken in battle, etc. Many things came from Otaheite, possibly in the Pacific. Two possible "indicators" are the superb feather cloak, presented to Captain Cook, shortly before his death, by the King of Owyhee, and a Roman sandal found in Hawford Moss, Cheshire.

Ryall was somehow connected with a Mr. Hall, because on the fourth day he bought for Hall. Both attended several days of the sale. Hall purchased a variety of birds from all over the world, none of which gives a clue as "indicator". Ryall too obtained all kinds of birds, though mostly British ones. There is only one possible "indicator-bird", being a roller, shot on the Isle of Sanday, Orkneys, in 1818. However, this bird is not mentioned in the careful study of Baxter & Rintoul (1953), which enlarges the probability that Ryall's collections perished.

The author realises that the hope of tracing any of Bullock's Island Hens is extremely small. Nevertheless, anyone who can give any possible information either about Winn, Ryall, or Hall, or about the "indicators", is kindly requested to write to A. J. Beintema, c/o Zoologisch Museum afd. Vogels, Plantage Middenlaan 53, Amsterdam, The Netherlands. (The spelling of "Wynn" and "Ryall" may be changed.)

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SUMMARY

In recent years it has been suggested that the three specimens of *Gallinula nesiotis* claimed to have emanated from Tristan da Cunha, in reality were collected on Gough Island, and that the Tristan form was non-existent. From old records it appears that not only did the species live on Tristan, but also that at least 15 specimens are claimed to have been collected there. Of these, seven or eight have been traced and examined by the author or others. The only completely authentic material is a skin and an incomplete skeleton in the British Museum (Natural History), and another incomplete skeleton in the University Museum of Zoology, Cambridge. The skin of *G. n. nesiotis* of Tristan is indistinguishable from those of *G. n. comeri* of Gough Island. But the two forms appear separable on skeletal measurements, which indicate that the latter is of heavier build. Although *comeri* still survives, *nesiotis* became extinct towards the end of the last century.

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